## Alignment of Credential Content to Postsecondary Learning Outcomes for Safety and Sanitation

Postsecondary Learning Outcomes (Copied from CTCF001 - Sanitation and Safety)	Content from ServSafe Credential  (Taken from the ServSafe Manager coursebook and corresponding  ServSafe Manager Certification examination)
Identify pathogens, and the toxins that some produce, responsible for foodborne illnesses that can occur in food and develop during the preparation of food	<ol> <li>What a foodborne illness is and how to determine when one has occurred</li> <li>Contaminants that can make food unsafe</li> <li>Conditions that affect the growth of foodborne bacteria (FAT TOM)</li> <li>Major foodborne pathogens and their sources; resulting illnesses and their symptoms</li> <li>Ways of preventing viral, bacterial, parasitic, and fungal contamination</li> <li>Naturally occurring toxins and ways of preventing illnesses caused by them</li> <li>Physical and chemical contaminants and methods of prevention</li> <li>Points in the operation where food is at risk from deliberate contamination</li> <li>The most common food allergens and their associated symptoms</li> <li>Methods of preventing allergic reactions</li> </ol>
Define concepts and procedures for the flow of food through the operation	<ol> <li>Ways of preventing cross-contamination</li> <li>Ways of preventing time-temperature abuse</li> <li>Different types of temperature-measuring devices and their uses</li> <li>How to calibrate thermometers</li> <li>General guidelines for thermometer use</li> <li>Characteristics of an approved supplier</li> <li>Guidelines for receiving and inspecting deliveries</li> <li>Requirements for key drop deliveries</li> <li>Procedure for handling food recalls</li> <li>Procedures for checking the temperatures of various food items</li> <li>Temperature requirements when receiving food</li> <li>Packaging requirements when receiving food</li> <li>Government inspection stamps required when receiving food</li> <li>Quality requirements when receiving food</li> <li>Receiving criteria for specific food items</li> </ol>

- 17. Requirements for labeling and date marking food
- 18. How to rotate food using first-in, first-out (FIFO)
- 19. Temperature requirements for food in storage
- 20. Practices that can prevent temperature abuse during storage
- 21. Practices that can prevent cross-contamination during storage
- 22. Guidelines for storing specific types of food including meat, poultry, fish, shellfish, eggs, produce, and dry food
- 23. Correct ways for prepping food to prevent cross-contamination and time-temperature abuse
- 24. Safe methods for thawing food
- 25. The minimum internal cooking temperatures for TCS food
- 26. The correct way to cook TCS food in a microwave oven
- 27. The importance of informing consumers of risks when serving raw or undercooked food
- 28. Requirements for partially cooking TCS food
- 29. Methods and time-temperature requirements for cooling TCS food
- 30. Time and temperature requirements for reheating TCS food
- 31. Time and temperature requirements for holding hot and cold TCS food
- 32. Ways of preventing time-temperature abuse and cross-contamination when displaying and serving food
- 33. The requirements for using time rather than temperature as the only method of control when holding TCS food
- 34. Ways of minimizing bare-hand contact with ready-to-eat food
- 35. How to prevent staff from contaminating food during service  $\,$
- 36. How to prevent guests from contaminating self-service areas
- 37. The possible hazards of transporting food and ways of preventing them
- 38. The possible hazards of serving food offsite and ways of preventing them
- 39. The possible hazards of vending food and ways of preventing them
- 40. The seven HACCP principles for preventing foodborne illness

Differentiate among various cleaning products and sanitizing products and identify common pests and appropriate methods of eradication.	<ol> <li>Correct cleaners for specific tasks</li> <li>Methods of sanitizing and requirements for their effective use (e.g., contact time, water temperature, concentration, water hardness, pH)</li> <li>How and when to clean and sanitize food-contact surfaces</li> <li>Guidelines for using dishwashing machines</li> <li>How to clean and sanitize items in a three-compartment sink</li> <li>How to clean nonfood-contact surfaces</li> <li>How to store clean and sanitized tableware and equipment</li> <li>Storage requirements for chemicals and cleaning tools</li> <li>How to develop a cleaning program</li> <li>Methods for denying pests access to an operation</li> <li>Methods for denying pests food and shelter</li> <li>Signs of pest infestation and activity</li> <li>How to correctly store pesticides</li> <li>How to select a pest control operator (PCO)</li> </ol>
Describe operational practices that comply with laws, rules, and regulations (of the Ohio Department of Health, FDA, USDA, and OSHA) governing hospitality/ tourism operations standards and identify training methods to ensure compliance.	<ol> <li>Challenges to food safety</li> <li>Costs of a foodborne illness</li> <li>How food handlers can contaminate food</li> <li>The correct handwashing procedure</li> <li>When and where hands should be washed</li> <li>Hand-maintenance requirements</li> <li>The correct way to cover infected wounds</li> <li>The importance of avoiding bare-hand contact with ready-to-eat food</li> <li>How to use single-use gloves and when to change them</li> <li>Requirements for staff work attire</li> <li>Jewelry that poses a hazard to food safety</li> <li>Policies regarding eating, drinking, and smoking as they relate to food safety</li> <li>Criteria for excluding staff from the operation or restricting them from working with exposed food, utensils, and equipment</li> <li>Illnesses that need to be reported to the regulatory authority</li> <li>Methods for achieving active managerial control</li> <li>The public health interventions of the Food and Drug Administration (FDA)</li> </ol>

- 18. Specialized processes that require a variance
- 19. How to prepare for, respond to, and recover from a crisis
- 20. How to respond to a foodborne-illness outbreak
- 21. How to respond to imminent health hazards, including power outages, fire, flood, water interruption, and sewage
- 22. When a review of the construction plan is required
- 23. Characteristics of correct flooring
- 24. Characteristics of correct interior finishes, including doors, walls, and ceilings
- 25. Requirements for restrooms
- 26. Requirements for handwashing stations
- 27. Requirements for food-contact surfaces
- 28. Organizations that certify equipment that meets sanitation standards
- 29. Requirements for dishwashing facilities
- 30. Requirements for installing equipment
- 31. Approved water sources and testing requirements
- 32. Methods for preventing cross-connection and backflow
- 33. The correct response to a wastewater overflow
- 34. Lighting-intensity requirements for different areas of the operation
- 35. Ways of preventing lighting sources from contaminating food
- 36. Ways of preventing ventilation systems from contaminating food and food-contact surfaces
- 37. Requirements for handling garbage, including correct storage and removal
- 38. The importance of keeping physical facilities in good repair
- 39. Government agencies that regulate food operations
- 40. The importance of regulatory inspections and self-inspections
- 41. The key components of an inspection
- 42. Corrective actions to take when found to be in violation of a regulation
- 43. Staff duties and specific training needs for each duty
- 44. Ways of training specific to staff and their duties
- $\ \, 45.\,\, How \,to \,maintain \,food \,safety \,training \,records$
- 46. How to ensure all staff are trained upon and after being hired